

**Farmaceutička komora  
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Pharmaceutical Chamber of Montenegro



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**CALIMS**

U SARADNJI SA AGENCIJOM ZA LIEKOVE I MEDICINSKA SREDSTVA CRNE GORE

II KONGRES FARMACEUTA CRNE GORE SA MEĐUNARODNIM UČEŠĆEM  
II CONGRESS OF PHARMACISTS OF MONTENEGRO WITH THE INTERNATIONAL PARTICIPATION

# ZBORNIK SAŽETAKA ABSTRACT BOOK

FARMACIJA – NAUKA I PRAKSA VOĐENE HUMANOŠĆU  
PHARMACY - SCIENCE AND PRACTICE GUIDED BY HUMANITY

28-31. MAJ 2015. BUDVA, HOTEL SPLENDID

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## POSTER PREZENTACIJE

### ROLE OF CLINICAL PHARMACIST IN DEPRESSION TREATMENT

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Depression as one of the leading diseases in the world, is also equally present in Bosnia and Herzegovina. Social factors, such as unemployment and socioeconomic status are favorable conditions for the development of depression, but also as an important factor for its development is post traumatic stress disorder (PTSD), which is largely a result of the war in the late twentieth century in BiH. In BiH, there is no official register of persons suffering from depression.

Aim of this work is to show the necessity of including a clinical pharmacist in the team for the treatment of depression.

Data collected from the Department of Psychiatry, University Clinical Hospital Mostar  
A study conducted by the American Pharmaceutical Association

A study conducted by the American Pharmacists, (University of Michigan College of Pharmacy)  
In studies conducted by the American Pharmaceutical Association and the American Pharmacists with the University of Michigan, a clinical pharmacist was part of a team of health professionals involved in treatment and screening for depression. Of the total number of patients, 80% had a visible reduction in symptom severity between their first and last visit. The average result of self-assessment of depressive symptoms was reduced from 11.5 (moderate severity), at the beginning of treatment, at 5.3 (mild severity). Total health care costs were lower than initially foreseen.

In the period from January 2014 to 31 August 2014, at the Department of Psychiatry, University Clinical Hospital Mostar 2,214 patients were hospitalized, of which 12,54% were hospitalized for depression. However, in the treatment of patients in BiH, clinical pharmacist is not part of the team of health professionals.

Clinical pharmacist as part of the team of health professionals have ability to start and stop treatment with certain drugs, and also adjust drug dose for right treatment of depression.

Keywords: Depression, clinical pharmacist, treatment and screening for depression

### KNOWLEDGE, EXPECTATIONS AND SELF MEDICATION IN THE ADULT POPULATION IN THE REPUBLIC OF MACEDONIA

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Self-medication ie using of medications without doctor's prescription becomes a problem, most of all because the patients are not informed for the possible consequences from the willfully taking of medications, as interactions medicine – medicine and increased risk from the appearance of harmful effects from the medicines taken in doses bigger than usual wherein

appears potential abuse of the medicines. Self-medication allows quick access to the medicines because of their permanent and wide availability on the market itself.

Using of medicines for self-medication is constantly increasing and one of the most often used medicines for self-medication are the medicines that are used for treating the symptoms of cold, slightly increased temperature, headache and other types of pain, diarrhea and so on. In Republic of Macedonia medicines that are used for self-medication (self-treating) are safe and efficient if they are given in recommended doses and also if are followed the recommendations given from the World Health Organizations.

We have made research on a patients from different ages with purpose to determine the most often reasons for using of the self-medication, knowing the possible indications and contraindications, how often they use the medicines for self-medication, and also if the commercials for the medicines for self-medications have influence on the opinion of the patients.

Key words: contraindications, indications, pain, security, efficiency.

## AFINITET RAZLIČITIH ŽUČNIH KISELINA PREMA TRANSPORTNIM PROTEINIMA ZA LEKOVE U BIFIDOBACTERIUM LONGUM NCC2705

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Zbog uloge crevne mikroflore u inter- i intra- individualnim razlikama u metabolizmu lekova, kao i zbog uloge žučnih kiselina (ŽK) u modifikaciji prodora lekova kroz biološke membrane, cilj rada bio je da se ispita afinitet različitih ŽK (holna (CA), 12-monoketoholna (12-MKC) i deoksiholna (DCA) kiselina) prema multidentrug transporterima prisutnih kod probiotske bakterije Bifidobacterium longum NCC2705 (BL), kako bismo pretpostavili koja od njih ima najveći uticaj na transport lekova.

Kako bi se uporedili afiniteti posmatranih ŽK prema multidentrug transporterima kod BL (6 iz ABC familije i 8 sekundarnih transportera), urađena je docking studija. Ona je izvršena pomoću programa SwissDock. I-Tasser server je korišćen za predviđanje strukture transportnih proteina na osnovu njihove amino-kiselinske sekvence. Rezultati dokinga dati su kao FullFitness energije pri čemu manja energija ukazuje na jači afinitet liganda prema određenom proteinu.

Najniže energije sa svim ispitivanim transportnim proteinima pokazala je DCA, dok su CA i 12-MKC imale nešto više, međusobno slične energije. Za sve tri ŽK, najveći afinitet pokazan je za BL1767 transporter iz ABC porodice. S druge strane, najviša energija i posledično najmanji afinitet procenjen je za BL1703, sekundarni transporter. Dobijeni rezultati ukazuju da sve ispitivane ŽK imaju generalno jači afinitet ka ABC transporterima u odnosu na sekundarne transportere.

Na osnovu dobijenih rezultata docking studija može se pretpostaviti da se uticaj ŽK na transport lekova kroz membranu BL očekuje pre uticajem na ABC transportere nego na sekundarne transportere. Osim toga, zbog najjačeg afiniteta vezivanja za bakterijske transportere, najveći

uticaj na transport le  
preduzeti dalja in vivo

Ključne reči: docking,

## THE AFFINITIES OF IN BIFIDOBACTERIUM

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Mikov<sup>1</sup>

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University of Novi Sad

<sup>2</sup>Department of Pharm

Due to implication of  
and the role of bile acids  
the aim of this study was  
(MKC) and deoxycholic  
NCC2705 (BL), in order  
transport.

Docking study was con  
transporters in BL (6  
Docking step was performed  
used to predict the protein  
Results of docking study  
energy indicates the h  
The lowest energies  
higher, but similar en  
BL1767. On the other  
estimated for second  
that all examined BA  
secondary transporter  
Based on the obtained  
transport through the m  
transporters. Furtherm  
is expected from DCA  
interactions at molecu

Keywords: docking, bi